Pathologica is intended to provide a medium for the communication of results and ideas in the field of morphological research on human diseases in general and on human pathology in particular. The journal welcomes contributions concerned with experimental morphology, ultrastructural research, immunocytochemical analysis, and molecular biology. Reports of work in other fields relevant to the understanding of human pathology may be submitted as well all papers on the application of new methods and techniques in pathology. The official language of the journal is Italian. Articles from foreign authors will be published in English.

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Do not use, under any circumstances, graphical layout programmes such as Publisher™, Pacemaker™, Quark X-press™, Adobe Indesign™. Do not format the text in any way (avoid styles, borders, shading ...); use only character styles such as italics, bold, underlined.

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Must be limited in number (the same data should not be presented twice, in both the text and tables), typewritten one to a page, and numbered consecutively with Roman numbers. In the text and legend of the tables, Authors must use, in the exact order, the following symbols: *, †, ‡, §, **, ††, ‡‡ …

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Send pictures in separate files from text and tables.

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**Acknowledgements and information** on grants or any other forms of financial support must be cited at the end of the references.

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CONTENTS

Building blocks of the GIPU, Italian Group of Ultrastructural Pathology
V. Papa, R. Costa, G. Cenacchi

The Italian Group of Ultrastructural Pathology, GIPU, is a scientific organization committed to promote the art and science of Electron Microscopy (EM) in the pathology field in Italy, sharing its professional work with a public audience. The history of the GIPU goes back to 1990s when a founder group set up the Italian Group of Ultrastructural Diagnostic (GIDU) in Milan. The central focus of annual meetings was on EM, transmission and scanning one, about interesting cases in which it was instrumental in diagnosis. In the 1990s, ultrastructure was still the gold standard for cell/tissue morphology, biology, biochemistry, diagnostic pathology, and played an important role in tailored medicine. So, especially transmission EM, could play a critical role in the diagnosis of various diseases as in human as in animals. Best topics of the annual scientific meetings of the group were kidney, muscle, heart, and liver pathology, infertility, neuropathology, respiratory diseases, skin diseases, storage diseases, tumor pathology, infectious diseases, parasitology, veterinary pathology and more. Nowadays, EM is a method whose importance for diagnosis and pathology is well established: it is still essential in several pathologies, helpful in others, and welcome implemented in eclectic research pathology. Omission of EM likely makes the studies sub-optimal and wasteful. So, from 2007 the name of the group has been changed to the Italian Group of Ultrastructural Pathology (GIPU) to favor broader applications of EM also to pathology research field. During last decades, GIDU/GIPU has interconnected with international (Society for Ultrastructural Pathology) and european (European Society of Pathology and Joint Meeting with the European Electron Microscopy Working Group) scientific society, according its statute. By 1991, GIPU has had 40 members: membership in this Group is still open and welcome to all pathologists, PhD, electron microscopy technologists, pathology trainees, and researchers interested in pathology and electron microscopy.

REVIEWS

Programmed death 1 (PD-1) and its ligand (PD-L1) as a new frontier in cancer immunotherapy and challenges for the Pathologist: state of the art
M. Callea, F. Pedica, C. Doglioni

The interest in better understanding the immune-microenvironment and tumor cells crosstalk, recently leads to focus on immune checkpoints role, notably on PD-1/PD-L1 axis. The current backdrop concerning cancer immunotherapy is constantly evolving and new biomarkers still need to be granted in this dynamic context. This review tries to get lights on PD-L1 complex scenario mainly focusing on troubling issues in assessing this marker in daily practice. It’s still necessary to look deeper into this matter in order to make easier the pathologists-oncologist interaction.

Endobronchial-ultrasound needle aspiration and endoscopic ultrasonoscopy- fine-needle aspiration in thoracic diseases

EBUS-TBNA and EUS-FNA are minimally invasive techniques rapidly gaining ground in the non-surgical invasive diagnostic approach to thoracic diseases due to their high accuracy and low morbidity and mortality compared to surgical techniques. Moreover, in the diagnosis and staging of lung cancer the combination of the two techniques is superior to either test alone. In this review we focus on the role of EBUS-TBNA and EUS-FNA in both malignant and non-malignant thoracic diseases.

ORIGINAL ARTICLE

Pathological assessment of epilepsy surgery brain tissue
G. Marucci, M. Giulioni

Surgical resection represents a successful strategy to achieve seizure control in patients with drug resistant epilepsy. In the last years increasing importance has been recognized to pathological substrate for epilepsy classifications and for predicting seizure and neuropsychological outcome after surgery. The current histopathological classifications of epilepsy-associated abnormalities certainly represent an amazing effort to overcome the limits of the previous classifications and constitute a formidable tool in the management of patients after epilepsy surgery. However the correct application of the recent ILAE classification systems begins with a proper epilepsy surgery technique, able to provide “en bloc” and “spatially oriented” surgical specimens and continues with the use of an appropriate pathological workup and reproducible stains. This methodological approach permits to relate the surgical outcome to the specific pathological findings, the site of the lesion, and the surgical strategy. These data are essential to an adequate preoperative patient and family counselling. Furthermore in this paper, besides the workup and the classification systems, we evidence some aspects which may be challenging and sometime misleading in clinical practice. In conclusion, a pathology based approach to epilepsy surgery is essential and might improve the interpretation of the outcomes and the comprehension of the causes of failures.

CASE REPORT

Diagnostic role of detecting HPV in a FNAC of metastatic laterocervical lymph node in a case of occult HPV-related head and neck squamous cell carcinoma
A. Ginori, F. Scaramuzzino, M.A.G. Munzerzo Batorano, A. Barone, A. Disanto

Human papillomavirus (HPV)-related head and neck squamous cell carcinomas (HNSCC) are radiosensitive tumors and have a better prognosis than the conventional keratinizing HNSCC. Despite extensive radiographic and clinical evaluation in approximately 3% to 5% of patients who present with cervical lymph node metastases, the primary tumor remains occult. The lack of a clinically identifiable primary tumor usually leads to more aggressive therapy, which can result in higher morbidity. Herein, we report a case of a patient with an occult HPV-related HNSCC, diagnosed detecting HPV in a fine needle aspiration cytology (FNAC) of metastatic laterocervical lymph nodes.